MADATRON CORPORATION

MADATRON READ-ONLY MEMORY DRUM

We have had numerous inquiries regarding the Madatron Display System Drum, primarily because of its small size, reliable operation and low cost per bit and as a result we have decided to offer this component for sale. Until such time as a suitable brochure is available, we can offer the following:

The drum itself is 2 1/8" in diameter and is currently available as a 4 or 5 channel unit. It weighs less than 1 ounce, is equipped with sapphire bearings and a hardened steel shaft. Considering the low weight of the drum and this type of bearing system, the design should permit reliable operation for ten years without lubrication, or ten years beyond the point a lubricant dries out. Production of our standard display system requires only a maximum of 6.4 K bits on a 4 channel drum, and such a read-only memory drum is immediately available for sale. Somewhat higher bit densities and/or additional channels may be available on special order to obtain larger memory capacity.

Our R & D efforts, on an experimental basis have achieved bit densities in the order of 800 bits per inch (over 21K bits on our standard 4 channel drum). To date this has not been accomplished in production and it is believed that further development would be required to economically achieve such bit densities.

The drum rotates at 30 revolutions per second by means of a 4 watt, 4 pole, synchronous, clock-type motor. Our present design offers a modular type enclosure utilizing a printed circuit board to which the track wiring is connected so that these connections are available to a standard edge connector. The housing for the drum, pickup head and motor assembly and the male portion of the edge connector is approximately 2 1/2" wide by 4" high by 1" deep.

Our proposed offering includes, in the above housing, appropriate circuitry for each channel to provide a positive logic signal output. The pricing for a 4 channel unit, as described above, is $150 each in unit quantities and in the area of $85 each in production quantities. This price includes programming of the drum and an additional one-time charge of $250 is required to develop the necessary punched tape on our computer in order to accomplish the actual programming. If you are interested in this approach it would only be necessary for you to provide a list of "1's" and "0's" describing your program.

If you wish to eliminate the $250 charge we would be pleased to accept a standard 1" wide, 8 level, punched tape 12,800 feed holes long. The tape should be punched in the following manner:

1   Use tape channels 1, 3, 4 and 5 which are designated as such when the feed holes are located between channels 3 and 4.

2.   Provide a start and stop code on channel 8 encompassing the 12,800 feed holes. A single hole for start and 4 consecutive holes for stop are required on channel 8, and no other holes between these codes.

3.   Wherever a hole is punched it will correspond to the "1" state in the output voltage level. Similarily, the absence of a hole corresponds to the "0" state.

4.   Either logic level must exist for a minimum of 4 feed holes; that is, the minimum logic time for a "1" or "0" is 4 feed holes.

Delivery is quite negotiable, depending on your needs. Terms are 1/2 of 1% /10, net 30; F.O.B., Whippany, N. J.

Modifications to our standard drum are considered feasible and subject to negotiations on a shared development basis.